



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/612,405 | 07/03/2003 | Hiroshi Watanabe | 016907-1569 | 3582 |
| 22428 | 7590 | 09/30/2005 | EXAMINER | |
| FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007 | | | NGUYEN, VINCENT Q | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2858 | |

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/612,405 | WATANABE ET AL. | |
| | Examiner | Art Unit | |
| | Vincent Q. Nguyen | 2858 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 25-31 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14 is/are allowed.
- 6) ☒ Claim(s) 1,4,7 and 10-13 is/are rejected.
- 7) ☒ Claim(s) 2,3,5,6,8 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/29/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Claims 1-24 in the reply filed on 3-3-05 is acknowledged.

The Election/Restrictions requirement is thus made FINAL.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4, 7, 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Lancaster et al. (5,760,644).

With respect to Claims 1, 4, Lancaster teaches the first functional block (power supply), the second functional block (memory which stores information) in column 2, lines 25-28, the signal line in column 2, lines 20-25 and the front page diagram and the semiconductor time switch in the Abstract and figures 2-5.

With respect to Claim 7, Lancaster teaches the first input/output terminal 302 and the third functional block (-7 volts) connected to another terminal 301 of the semiconductor time switch 31' in figure 3.

With respect to Claim 10, Lancaster teaches the source region (left side 5Q), the drain region (right side 50) formed apart from each other, the gate electrode 40 insulatively formed in a channel between the source and drain region in figure 3 and the

source 302 and the drain 303 being used as two connection terminals to connect first and second functional blocks in figure 3.

With respect to Claim 11, Lancaster teaches the non-conductive channel over time in figure 2 and the supply of charge to the gate electrode in advance in figure 3 and column 2, lines 30-37.

With respect to Claim 12, Lancaster teaches the NPN junction in figure 3. With respect to Claim 13, Lancaster teaches the charges on the gate electrode 40 leak through an insulating member (dielectric) in column 2, lines 30-32.

Allowable Subject Matter

4. Claims 2-3,5-6,8-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Claims 14-24 are allowed.

5. The following is an examiner's statement of reasons for allowance:

The prior art of record does not teach or suggest a semiconductor integrated circuit having an aging circuit configured by parallel-connecting a plurality of aging devices in which an age-based change occurs while a power supply is disconnected, and an output signal sensed in read changes over time, as recited in the independent claim 14;

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

6. Applicant's arguments filed 8/12/2005 have been fully considered but they are not persuasive.

In response to Applicant that: "Specifically, Lancaster does not disclose that the timer 30 connects two functional blocks in order to allow mutual access between the functional blocks. While Lancaster discloses that the timer 30 may be embedded in other circuitry, Lancaster does not disclose any embodiment where the timer 30 connects two functional blocks in order to allow mutual access between the blocks."

It is respectfully noted that the "or" reads on alternative exclusive embodiments. Therefore, if the prior art reads on "substantially disable", the mutual access as Applicant argued become irrelevant.

In response to Applicant's argument that: "Lancaster does not disclose all the features of dependent claim 7. The Office Action appears to equate elements 301 and 302 of Lancaster with "the other terminal" of claim 7, which is connected to the third functional block, and the first input/output terminal, respectively. Element 301, however, is a gate electrode and is not "the other terminal of the semiconductor time switch" recited in claim 7. In contrast to claim 7, there is no time switch provided between source 302 and gate 301 of Lancaster which would function in the manner recited in claim 7."

In response to Applicant's argument that: "Element 301, however, is a gate electrode and is not "the other terminal of the semiconductor time switch". Examiner does not see why the gate electrode is not "the other terminal of the semiconductor time switch"?

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the function) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

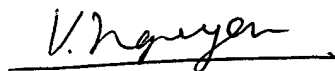
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent Q. Nguyen whose telephone number is (571) 272-2234. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in cursive script, appearing to read "V. Nguyen", is written over a horizontal line.

Vincent Q. Nguyen
Primary Examiner
Art Unit 2858

September 23, 2005